

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,163	08/05/2003	Takashi Koase	59694 (47793)	1751
21874	7590 07/18/2005		EXAM	INER
EDWARDS & ANGELL, LLP			JOHNSON, VICKY A	
P.O. BOX 55874 BOSTON, MA 02205			ART UNIT	PAPER NUMBER
			3682	
			DATE MAILED: 07/18/200:	DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/635,163	KOASE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Vicky A. Johnson	3682				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with	the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL	V IS SET TO EXPIRE 3 MOI	NTH(S) FROM				
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repless of the period for reply is specified above, the maximum statutory period. Failure to reply within the set or extended period for reply will, by statute the period for reply will, by statute the period for reply will, by statute the patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply ly within the statutory minimum of thirty (3 will apply and will expire SIX (6) MONTH e, cause the application to become ABAN	y be timely filed 30) days will be considered timely. S from the mailing date of this communication. DONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 20 h	May 2005.					
<u> </u>						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-9 is/are pending in the application.						
4a) Of the above claim(s) 8 and 9 is/are withdr	4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>05 August 2003</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s)	is objected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached C	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreigr	n priority under 35 U.S.C. § 1	19(a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documen	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documen	ts have been received in App	olication No				
Copies of the certified copies of the price	ority documents have been re	ceived in this National Stage				
application from the International Burea	u (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list	t of the certified copies not re	ceived.				
Attachment(s)	🗖 .					
1) Motice of References Cited (PTO-892) 2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	nmary (PTO-413) Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08	5) Notice of Info	rmal Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) 🔲 Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Art Unit: 3682

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I claims 1-7 in the reply filed on May 20, 2005 is acknowledged. Claims 8 and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a radius of said axis of said auxiliary roller near the center of said axis in its axial direction is larger than a radius of said axis of said auxiliary roller at its other part in its axial direction, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

Art Unit: 3682

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 71, 690. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "942" has been used to designate both the fixing projection and a second member (unknown) see Fig 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

Art Unit: 3682

abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities: on page 16 line 4 "member 92" should be —member 72--; on page 19 line 1 "liking" should be --linking--; on page 20 lines 21 and 31 the "contacting unit" is designated by 924 and 944. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 8. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 it is unclear what is meant by the limitation "said auxiliary roller hold".

In claim 4 it is unclear what is meant by the "said pulley becomes to be engaged". For this office action the limitation will be interpreted as "said pulley becomes engaged".

Art Unit: 3682

In claim 5 it is unclear how the distance from the centers of the roller and the pulley can be shorter than the sum of the radius of the roller, the radius of the pulley, and the width of the belt.

In claim 6 it is unclear how an axis can have a radius. It is also unclear what is being claimed in claim 6. Neither the specification nor the drawings adds any further information regarding this feature. Is the pulley eccentric?

In claim 7, it is unclear how the holding unit holds the axes and it is also unclear what is meant by "said pulley is hold" and "said auxiliary roller is hold".

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 1-4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagaki (JP 2001-063866) in view of Okiyama et al (US 5,991,575), as best understood.

Nakagaki discloses a device comprising: a toothed pulley (25); an endless toothed belt (28) wound on said pulley, wherein a first surface of said toothed belt comprises teeth corresponding to teeth of said pulley and a second surface of said toothed belt is substantially smooth (see Fig 2); an auxiliary roller (32) for holding said toothed belt in a gap defined by said pulley and said auxiliary roller (see Fig 2); a roller holding unit (31) for holding said pulley and said auxiliary roller to be able to respectively

Art Unit: 3682

rotate on axes of said pulley and said auxiliary roller and maintaining said gap between said pulley and said auxiliary roller (see Fig 2).

Nakagaki does not disclose an urging member for urging said roller holding unit in a direction to said toothed belt around said pulley in order for said auxiliary roller hold by said roller holding unit to provide a tension to said toothed belt.

Okiyama et al disclose an urging member (17L) for urging said roller holding unit (16L) in a direction to said toothed belt around said pulley in order for said auxiliary roller hold by said roller holding unit to provide a tension to said toothed belt (see Fig 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Nakagaki to in clued an urging member as taught by Okiyama et al in order to prevent belt skew.

Re claim 2, Nakagaki shows the driving pulley (25) and it is inherent that it is coupled (directly or indirectly) to a motor.

Re claim 3 Nakagaki shows said auxiliary roller provides said tension to said toothed belt at an engagement end point where said pulley is disengaged from said toothed belt when said toothed belt is rotated in a forward direction (see Fig 2).

Re claim 4, Nakagaki shows said engagement end point is a point where said pulley becomes to be engaged with said toothed belt when said toothed belt is rotated in a reverse direction (see Fig 2).

Re claim 7, Nakagaki shows said roller holding unit holds said axes of said pulley and said auxiliary roller by inserting therein said axes (see Fig 2), a first cut-in portion and a second cut-in portion is formed on said roller holding unit (see Fig 2).

Art Unit: 3682

Re claims 5 and 6, the patentability of claims 5 and 6 cannot be determined because it is unclear what is being claimed.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6,485,207 Allen et al (tensioner) 6,628,909 Monahan et al (tensioner)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vicky A. Johnson 4/2

Art Unit 3682